STATEMENT OF BENJAMIN H. GRUMBLES ACTING ASSISTANT ADMINISTRATOR FOR WATER U.S. ENVIRONMENTAL PROTECTION AGENCY BEFORE THE GOVERNMENT REFORM COMMITTEE UNITED STATES HOUSE OF REPRESENTATIVES

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Good morning, Mr. Chairman and Members of the Committee. I am Benjamin Grumbles, Assistant Administrator for Water at the United States Environmental Protection Agency (EPA). I welcome this opportunity to return to the Committee to update members on activities that EPA has been taking at the national level to address the issue of lead in drinking water. Regional Administrator Welsh will update you on efforts to address the specific situation related to elevated lead levels in the District of Columbia's (D.C.'s) drinking water.

Background on the Lead and Copper Rule

First I want to review the purpose of the Lead and Copper Rule (LCR). As you may remember, the LCR has four main functions: (1) require water suppliers to optimize their treatment system to control corrosion in customers' plumbing; (2) determine tap water levels of lead and copper for customers who have lead service lines or lead-based solder in their plumbing system; (3) rule out the source water as a source of significant lead levels; and, (4) if action levels are exceeded, require the suppliers to educate their customers about lead, and actions they can take to reduce their exposure to lead, through public notices and public education programs. If a water

utility, after installing and optimizing corrosion control treatment, continues to fail to meet the lead action level, it must begin replacing the lead service lines under its ownership until such time that the utility's 90th percentile results demonstrate that it is below the action level for two consecutive monitoring periods.

The action level for the rule is 15 parts per billion as calculated by the 90th percentile of tap monitoring results. If lead concentrations exceed the action level in more than 10% of the taps sampled, the utility must undertake a number of additional actions to control corrosion and to inform the public about steps they should take to protect their health. It is important to note that exceeding the action level does not constitute a violation. A utility incurs a violation if it fails to carry out actions required by the regulations.

Some utilities may be able to achieve 90th percentile levels that are below the action level without corrosion control treatment because they either do not have significant sources of lead in their system (e.g., lead service lines) or because the water is naturally non-corrosive. However, as a precautionary measure, the rule required large utilities serving more than 50,000 people to conduct studies of corrosion control and install state-approved optimal corrosion control treatment by January 1, 1997. Small and medium sized utilities are required to optimize corrosion control when monitoring at the consumer taps shows action is necessary.

National Activities to Evaluate Lead in Drinking Water

Since I last appeared before this committee on May 21, 2004, my staff have been carrying out a number of activities to address the specific issue of lead in drinking water

from a national perspective. We have also continued to work with the Region to provide technical assistance in identifying a treatment solution for D.C.

Our national review placed a focus on determining if the existing rule is being effectively implemented by states and local communities and on identifying where additional guidance or changes to the regulation might be needed to improve implementation. Earlier this week we announced our decision to move forward on implementing a number of actions to respond to findings from our review. As part of our plan, we are going to initiate an effort to make several targeted changes to the regulations and significantly revise two guidance documents. We expect to complete the process needed to propose regulatory revisions and complete the guidance documents in late 2005 or early 2006.

We will continue to review implementation of the regulations and maintain oversight efforts to ensure that the rule is being carried out effectively at the state and local level. We will continue to work with partners to promote research in key areas, and on efforts to protect children from lead (including partnerships between utilities and schools to test for lead). We will also convene an additional expert workshop in mid-2005 to discuss issues associated with the lead content of plumbing fittings and fixtures and performance standards to control leaching of lead.

We will also continue to work on a number of other issues that require additional data collection, research, analysis and/or full stakeholder involvement to support decisions. Our intent is to add elements and actions to this plan as needed to respond to the results of any further research, analysis and evaluation.

Before going into the details of our plan, I want to review the activities we carried out to help us make decisions. During the year we: (1) collected and analyzed lead concentration data and other information required by the regulations; (2) carried out a review of implementation in states; (3) held four expert workshops to further discuss elements of the regulations; and (4) worked to better understand local and state efforts to monitor for lead in school drinking water, which included a national meeting to discuss challenges and needs.

Analysis of Monitoring Results

When I first testified before you last year, I was unable to give you a complete picture of the degree to which water utilities were exceeding the action level. This was because we had data for fewer than 25% of the utilities for which states are required to report to EPA's Safe Drinking Water Information System (SDWIS). Clearly this was unacceptable. Our focus for much of last year was to ensure that we had complete information in our data system. States responded to our request to update the database, and we now have data for more than 95% of the utilities serving more than 3,300 which are required to report all 90th percentile results.

Our review of the data suggests that the rule's focus on minimizing lead exposure by controlling corrosion in treated water has been successful. Data provided by states indicates that 90th percentile levels for approximately 96% of the utilities subject to the rule are below the 15 ppb action level - due, in part, to efforts taken by utilities to control corrosion. This is not meant to diminish the clear challenges that DC and some other cities have experienced and continue to experience. Utilities must remain vigilant to ensure that treatment continues to control corrosion. A summary of

the data that we posted on our website in late June 2004 showed that 88 of 2,758 (3.2%) utilities serving more than 3,300 people had exceeded the action level for monitoring periods ending after January 2003. We are working to update that summary to reflect data received as of late January 2005 which includes data from additional water utilities and for additional monitoring periods. A preliminary review of that data indicates that 111 of 3,114 utilities (3.1%) exceeded the action level for monitoring periods ending after January 2003, a percentage consistent with our June 2004 value. Review of Implementation at the State and Utility Level

Early in our review of implementation we identified several areas where states or utilities were misinterpreting the rule, in particular in how states were managing samples. In November 2004, I issued a memorandum to Regional Administrators to remind states and utilities of specific requirements in order to ensure that utilities would promptly begin implementing the required sampling protocols.

Between August and December 2004, we carried out detailed reviews of implementation in 10 states, one in each region. We reviewed individual files for more than 450 utilities with a focus towards determining if 90th percentiles are properly calculated, reviewing responses to action level exceedances and identifying potential sampling issues related to site selection, changes in sampling sites, repeat sampling, and invalidation. Our goal was to identify common issues associated with implementation that may need to be addressed by training, guidance, or regulatory changes.

Currently we are working to complete an analysis of the information collected as part of the on-site reviews. This will help us to further identify areas on which to target

oversight and compliance assistance efforts. We will also work with the individual states reviewed to address and correct problems identified during the reviews.

Expert Workshops

When I last appeared before you in May 2004, I informed you about two of our expert workshops that had been held earlier that month. Those two workshops focused on monitoring programs and simultaneous compliance (which is related to the considerations utilities must take into account to balance treatment processes in addressing multiple risks).

We convened two additional expert workshops in the latter half of 2004. The first focused on public education requirements of the rule and risk communication practices. Participants discussed specific concerns with the existing public education language in the rule and suggested potential approaches to improve and refine the message content. Participants also discussed methods to improve risk communication to the public - by establishing partnerships with health departments and other groups, improving message delivery, and spending more time planning and evaluating the effectiveness of risk communication.

The final workshop held in 2004 was focused on lead service line replacement. Participants discussed four general topics related to lead service line replacement: inventory management, replacement methods, testing (before and after replacement), and communication. Participants discussed the problems they have encountered in these topic areas, particularly in motivating customers to take action with respect to replacing lines or taking protective measures, and provided suggestions for guidance, and training that the Agency could provide to help states and utilities.

Our experience with the workshops was very positive. We received more than 200 suggestions from participants which included rule changes to improve implementation, additional guidance to help utilities make decisions, and research needs to help better understand specific issues related to achieving corrosion control. We provided summaries of each workshop on our website and considered all of the suggestions as we moved forward to make decisions on next steps.

Lead in Schools

In July of last year, we released a report that summarized the responses we received from state public health and environmental programs on program efforts they had undertaken to address lead in school drinking water. States agreed that minimizing lead in drinking water consumed by children is important and many are conducting surveys, expanding outreach efforts and taking advantage of partnerships to help them reach schools. They responded that they had implemented the requirements associated with the Lead Contamination Control Act of 1988 and continue to focus on ensuring that schools with their own water system are in compliance with the LCR. While several states have developed specific programs that are focused on improving drinking water quality and environmental health at schools, others indicated that it could be difficult to expand programs beyond existing efforts.

In December, 2004, we hosted a meeting, in partnership with the Department of Education, to discuss school and child care facility drinking water issues. Participants included representatives from the CDC, state associations representing schools and child care facilities, state public health program staff, water utilities, and environmental and educational advocate organizations. Panelists discussed the differences between

regulated schools and child care facilities with their own water supplies and those that are served by other community water systems. Panelists also discussed issues associated with testing, remediation and communication strategies. They expressed a clear need for an update to EPA's existing guidance and additional guidance to help water utilities and school districts address this important issue.

Drinking Water Lead Reduction Plan

Based on the information derived from our review we have identified several opportunities to improve and clarify specific areas of the existing rule and our guidance materials. Earlier this week I announced efforts we are undertaking as part of our Drinking Water Lead Reduction Plan. In addition to continuing our oversight responsibilities and identifying opportunities for strategic partnerships, we are proposing nine targeted changes to the regulations and updating and expanding two guidance documents. Our focus is strengthening protection in five major areas: monitoring, treatment processes, customer awareness, lead service line management, and lead in school drinking water.

Monitoring

As previously noted, the Agency released guidance in November 2004 to clarify some existing requirements of the regulations. To address confusion about sample collection we will propose revision to the regulations to clarify language in the regulation that speaks to the number of samples required and the number of sites from which they should be collected. We will also propose modifying definitions for a monitoring period and compliance period and clarifying that all samples must be taken within the same

calendar year. Finally, we will propose to revisit provisions relating to criteria for reduced monitoring to reconsider allowing large utilities above the action level to reduce tap monitoring based solely on the results of their water quality parameter monitoring.

Treatment Processes

At our expert workshop on simultaneous compliance, we clearly heard the message that utilities and states could use additional guidance on how to consider the potential effects on corrosion control when a utility makes treatment changes to address other drinking water regulations. In 1999, EPA released a guidance on simultaneous compliance to accompany the Stage 1 Disinfection Byproducts Rule. The Agency is currently working to finalize its Stage 2 Disinfection Byproducts Rule and will provide an updated and expanded simultaneous compliance guidance to accompany that rulemaking. The American Water Works Research Foundation is also working to develop materials to assist utilities in this area. To further address concerns that utilities may not adequately consider the effects of treatment changes on corrosion control, we will propose a rule change to require that a utility notify the state 60 days prior to a treatment change, rather than 60 days after such a change. This will allow the state an opportunity to provide input on the utility's decision to make treatment changes and to require additional monitoring, if the state determines that additional monitoring is needed.

Customer Awareness

As you know, one of the significant concerns in D.C. was that homeowners were not notified of the results of tap monitoring that took place in their homes. While many

utilities indicate that they provide the results of monitoring to customers, there is no requirement in the regulations. To address this issue, we will propose changes to the regulation to require that utilities provide occupant notification of the results of monitoring to detect lead in drinking water. This would include homeowners who participate in tap monitoring programs and parents, students, and staff at schools that are required to monitor for lead in drinking water because they are also a regulated water utility. We will also seek changes to the regulations to permit states to allow utilities to modify the tap flushing directions to address local circumstances (e.g., 10 minute flushing recommendation for D.C.) and provide information to states and utilities to help them determine an appropriate flushing time to recommend to customers.

Lead Service Line Replacement

The regulations allow a utility to consider a lead service line that tests below the action level as "replaced" for the purposes of compliance. Many have been concerned that this is allowed and have requested that the Agency disallow the practice. At this time the Agency does not believe that the practice should be disallowed. If sampling shows that the levels of lead corroding from an individual household's service line and other plumbing are not elevated, then there is little benefit to incurring the cost and disruption of replacing the service line. However, we do not believe that a line that tests out should be permanently removed from the utility's inventory of lead service lines. Therefore, we are proposing to revise the rule to indicate that a line that tests out cannot be considered permanently replaced, such that if a subsequent treatment change

caused the utility to exceed the action level, the line would have to be reevaluated to ensure that it is not leaching elevated levels of lead.

Lead in School Drinking Water

As I mentioned, many participants at our public meeting on lead in school drinking water commented that our 1994 guidance, which was focused on lead in school drinking water and non-residential buildings, could use updating. We have begun to revise that document to focus on schools and child care facilities. It will include information on methods for testing, remediation, and communicating results to the public. EPA will also develop additional implementation guidance for schools and child care facilities that are regulated public water systems. My goal for schools is to emphasize prevention by focusing on the three "T"s - training, testing, and telling. We want to encourage schools and child care facilities to test drinking water outlets for lead. To this end, we are discussing developing partnerships with utility associations such as the American Water Works Association and other federal agencies to facilitate and encourage testing.

Oversight

We all know that a rule cannot be effective if it is not carried out. The Agency will continue its oversight efforts to ensure that the requirements of the rule are being met at the state and utility level. We will continue to provide assistance to improve implementation and coordinate with our counterparts at the federal and state levels as they pursue potential enforcement or compliance assistance actions.

Additional activities

We also have a number of additional activities underway to support our plan. One thing we heard time and again at our expert workshops was a frustration on the part of utilities that the Safe Drinking Water Act allows new plumbing fixtures and fittings to contain and leach lead. Their feeling was that materials that are in contact with water used for consumption should not contain lead. To help further that dialogue, we are planning to hold an expert workshop on lead content in plumbing materials in mid-2005. This workshop will consider the ability of manufacturers to develop products with much lower lead content and the ability of voluntary performance standards to control lead leaching from products.

We will work within EPA and with external research partners, such as the American Water Works Research Foundation, to promote research in key areas, which include gaining a better understanding of the effects of disinfectant treatment on corrosion, new and innovative methods to monitor for lead and copper corrosion and effective techniques in replacing lead service lines.

I want to be clear that we are not limiting our efforts to the specific items I have discussed today. We have also identified a number of issues that we will continue to review as part of potential, more comprehensive revisions to the rule or guidance. The issues require additional data collection, research, analysis and/or full stakeholder involvement to support decisions. The issues include, but are not limited to, revision of mandatory public education language to make sure it is relevant and understandable, requirements for consecutive systems, and broader revisions to monitoring and lead service line replacement requirements. We will provide additional information on these issues and others in the future as additional analyses are completed.

Conclusion

Mr. Chairman, our review of compliance and implementation, expert workshops and other efforts, have helped the Agency to determine how to move forward at this time. We believe the approach we are taking represents an appropriate response to the issues that have been identified. We will continue our efforts to review implementation and will work with members to respond to any questions or concerns you may have.

Our goal has been and will continue to be that the nation's citizens receive safe water and that utilities and States have the information they need to fully and effectively implement the rule and minimize risks to public health. EPA wants to ensure that citizens across the country are confident in the safety of their drinking water.

Thank you for the opportunity to testify this morning. I am pleased to answer any questions you may have.

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